MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE.

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INTRODUCTION.

The REVIEW for October, 1895, is based on reports from 2,760 stations occupied by regular and voluntary observers, classified as follows: 149 from Weather Bureau stations; 35 from U. S. Army post surgeons; 2,416 from voluntary observers; 34 from Canadian stations; 96 received through the Southern Pacific Railway Company; 30 from U. S. Life-Saving stations; international simultaneous observations are received from a few stations and used together with trustworthy newspaper extracts and special reports.

The WEATHER REVIEW is prepared under the general editorial supervision of Prof. Cleveland Abbe. Unless otherwise specifically noted, the text is written by the Editor, but the statistical tables are furnished by Mr. A. J. Henry, Chief of the Division of Records and Meteorological Data. A special acknowledgment is made of the hearty cooperation of Prof. R. F. Stupart, Director of the Meteorological Service of the Dominion of Canada.

CLIMATOLOGY OF THE MONTH.

GENERAL CHARACTERISTICS.

The mean temperature was generally deficient. Precipitation was deficient everywhere, except in southern Florida. High pressure and clear skies generally prevailed. The drought in the Ohio Valley continued severe. Local storms of all kinds were remarkably infrequent. Hurricanes from the West Indian region approached our coasts, but turned off before doing much damage. Unusual storms visited the Gulf of California and the Pacific coast of Mexico. The earthquake of the 31st was widely felt; it was most severe in southeastern Missouri and southern Illinois, but did only slight damage.

ATMOSPHERIC PRESSURE.

[In inches and hundredths.]

The distribution of mean atmospheric pressure reduced to sea level, as shown by mercurial barometers, not reduced to standard gravity, and as determined from observations taken daily at 8 a. m. and 8 p. m. (seventy-fifth meridian time), is shown by isobars on Chart II. That portion of the reduction to standard gravity that depends on latitude is shown by the numbers printed on the right-hand border.

The *mean pressures* during the current month were highest along a narrow ridge extending from Alabama and Tennessee westward to Oklahoma and Kansas, and thence northwest into British Columbia.

The highest were: Lander, 30.22; Cheyenne and Denver, 30.18; North Platte and Kansas City, 30.17. The lowest mean pressures were in southern California and Arizona, and pressure was also low north of the Lake Region and the mouth of the St. Lawrence.

The lowest were: Yuma, 29.86; Bird Rocks, 29.87; and Father Point, 29.90.

As compared with the normal for October, the mean pressure was in excess over the whole interior of the United States, and highest over the region between Oklahoma and Alberta.

The greatest excesses were: Lander, 0.14; Denver and Wichita, 0.12; Cheyenne, North Platte, Dodge City, and Pueblo, 0.11.

Pressure was deficient in Oregon, California, and Arizona, and also in the northern portion of the Lake Region.

The greatest deficits were: Rockliffe, 0.10; Block Island, 0.06; Nantucket, Portland, Me., Marquette, and Roseburg, 0.06; Yuma and Sacramento, 0.05.

As compared with the preceding month of September, the pressures, reduced to sea level, show a very general rise over the whole country west of the lower Lake Region and South Atlantic States. The greatest rises were: Cheyenne, 0.26; Denver and Lander, 0.25; Pueblo and Huron, 0.23; Concordia, Sioux City, Pierre, and Miles City, 0.22. The greatest falls were: Key West, Jupiter, and Nantucket, 0.04; Rockliffe, 0.03.

AREAS OF HIGH AND LOW PRESSURE.

[By Prof. FRANK H. BIGELOW.]

The tracks of thirteen areas of high pressure are plotted on Chart IV for the month of October. This chart shows that these tracks are confined almost exclusively to the southern circuit, only one having crossed the Great Lakes. Instead of originating near the coast line, as in summer, they showed a marked tendency to form along the high land of the mountain plateau; they spread southeastward along the Slope, five of them reaching the Atlantic coast, and two the Gulf of St. Lawrence.

The tracks of fifteen areas of low pressure are plotted on Chart I. Without exception all of these appeared first in the northwest, near the northern boundary of the United States, and moved east in the northern circuit, very near the axis of the mean storm track. There are only four unimportant departures from this mean course noted during the entire month. These depressions passed to the south and east of Florida, as West India cyclones, whose tracks remained so far out at sea as to make it difficult to plot correctly the real track followed; another slight disturbance occurred in the west Gulf.